6350

6350

MEDIUM-MU TWIN TRIODE

9-PIN MINIATURE TYPE

For "on-off" control applications involving long periods of operation under cutoff conditions

GENERAL DATA

Electrical:

Heater, Pure Tungsten, for Unipotential Cathodes:

Heater arrangement	*Series*	*Parallel*	
Voltage	12.6 ± 5%	6.3 ± 5%	ac or dc volts
Current	0.3	0.6	amp

Direct Interelectrode Capacitances:°

Grid to plate (Each unit)	3.2	μμf
Grid to cathode and heater (Each unit)	3.6	μμf
Plate to cathode and heater (Each unit)	0.6	μμf
Heater to cathode (Each unit)	4.6	μμf
Grid to grid	0.042 max.	μμf
Plate to plate	1 max.	μμf

Characteristics, Class A_1 Amplifier (Each Unit):

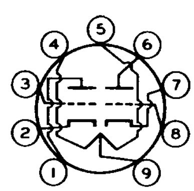
Plate Voltage	150	volts
Grid Voltage	−5	volts
Amplification Factor	18	
Plate Resistance (Approx.)	3900	ohms
Transconductance	4600	μmhos
Plate Current	11	ma
Grid Voltage (Approx.) for plate voltage of 150 volts and plate current of 100 μa	−11	volts
Grid Voltage (Approx.) for plate voltage of 200 volts and plate current of 1 ma	−12	volts

Mechanical:

Operating Position . . . . Any, but for the utmost in service, tube should be Vertical with base up or down, or Horizontal with pins 6 and 9 in vertical plane

Maximum Overall Length	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" ± 3/32"
Maximum Diameter	7/8"
Dimensional Outline	*See General Section*
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JETEC No.E9-1)
Basing Designation for BOTTOM VIEW	9CZ

Pin 1 - Plate of Unit No.2
Pin 2 - Cathode of Unit No.2
Pin 3 - Grid of Unit No.2
Pins 4 & 9 - Heater of Unit No.2
Pins 5 & 9 - Heater of Unit No.1



Pin 6 - Plate of Unit No.1
Pin 7 - Cathode of Unit No.1
Pin 8 - Grid of Unit No.1
Pin 9 - Heater Mid-Tap

° Without external shield.

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

6350

6350

MEDIUM-MU TWIN TRIODE

COMPUTER SERVICE and "ON-OFF" CONTROL SERVICE

Unless Otherwise Specified, Values are for Each Unit

Maximum Ratings, *Absolute Values:*

DC PLATE VOLTAGE	330	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE*	1000	max.	volts
DC GRID VOLTAGE:			
Negative bias value	80	max.	volts
Positive bias value	4	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE*	440	max.	volts
PEAK POSITIVE-PULSE GRID VOLTAGE*	14	max.	volts
DC GRID CURRENT	5.5	max.	ma
PEAK GRID CURRENT*	110	max.	ma
DC CATHODE CURRENT	45	max.	ma
PEAK CATHODE CURRENT*	350	max.	ma
PLATE DISSIPATION:			
Either plate	4	max.	watts
Both plates (Both units operating)	7	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	220	max.	volts
Heater positive with respect to cathode	220▲	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface)	120	max.	°C

Maximum Circuit Values:

Grid-Circuit Resistance:			
For fixed-bias operation	0.1	max.	megohm
For cathode-bias operation	0.5	max.	megohm

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN

Unless Otherwise Specified, Values are for Each Unit

	Note	*Min.*	*Max.*	
Heater Current	1	0.275	0.325	amp
Plate Current (1)	1,2	6	16	ma
Plate Current (2)	1,3	-	1	ma
Plate Current (3)	1,4	-	100	μa
Transconductance	1,2	3200	6000	μmhos
Amplification Factor	1,2	15	21	
Reverse Grid Current (Units in parallel)	1,5	-	2.5	μa
Heater-Cathode Leakage Current:				
Heater negative with respect to cathode	1,6	-	15	μa
Heater positive with respect to cathode	1,6	-	15	μa

* Under the following conditions: rectangular pulse; pulse duration, 0.08 microsecond; pulse-repetition rate, 1 x 10⁶ pps; and duty factor, 0.08.

▲ The dc component must not exceed 110 volts.

Notes 1 to 6: See next page.

6350

MEDIUM-MU TWIN TRIODE

	Note	Min.	Max.	
Grid-Voltage Difference Between Units	1,7	-	2.5	volts
Leakage Resistance:				
Between grid and all other electrodes tied together	1,8	100	-	megohms
Between plate and all other electrodes tied together	1,9	100	-	megohms

Note 1: With 12.6 volts ac or dc on heater (series arrangement).

Note 2: With plate volts = 150 and grid volts = -5. Each unit tested separately. Unit not under test connected to ground.

Note 3: With plate volts = 200 and grid volts = -15. Each unit tested separately. Unit not under test connected to ground.

Note 4: With plate volts = 150 and grid volts = -15. Each unit tested separately. Unit not under test connected to ground.

Note 5: With plate volts = 180, grid volts = -5, and grid-circuit resistance (megohms) = 0.1.

Note 6: With 100 volts dc between heater and cathode.

Note 7: With plate volts = 200 and grid voltage adjusted for plate current of 1 milliampere.

Note 8: With grid 100 volts negative with respect to all other electrodes tied together.

Note 9: With plate 300 volts negative with respect to all other electrodes tied together.

SPECIAL RATINGS & PERFORMANCE DATA

Heater-Cycling Life Performance:

Cycles of Intermittent Operation . . . . 2000 min. cycles

Under the following conditions: heater volts = 7.5 cycled one minute on and four minutes off, heater 180 volts positive with respect to cathode, and all other elements connected to ground.

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

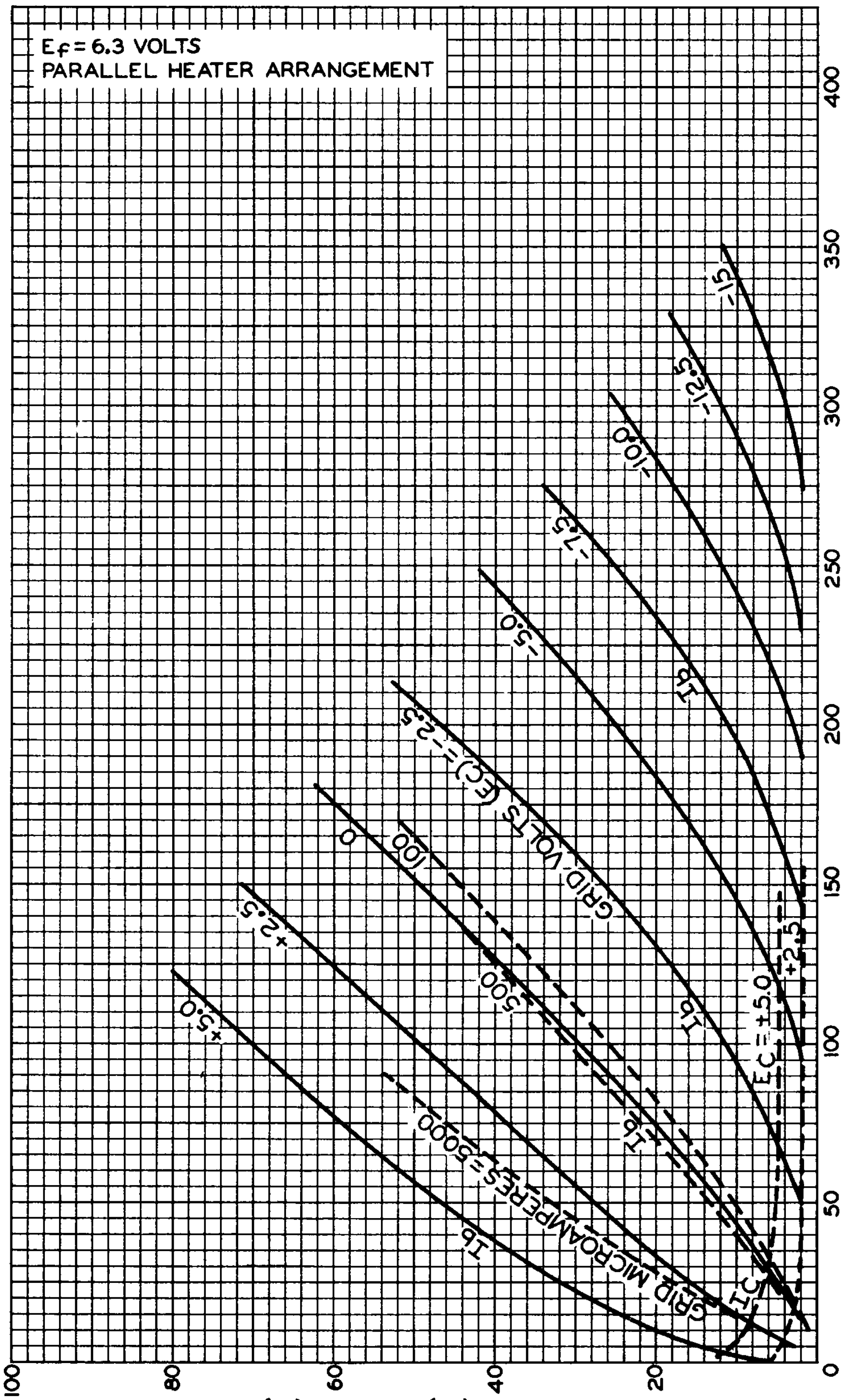
6350

RCA

6350

AVERAGE CHARACTERISTICS

EACH UNIT



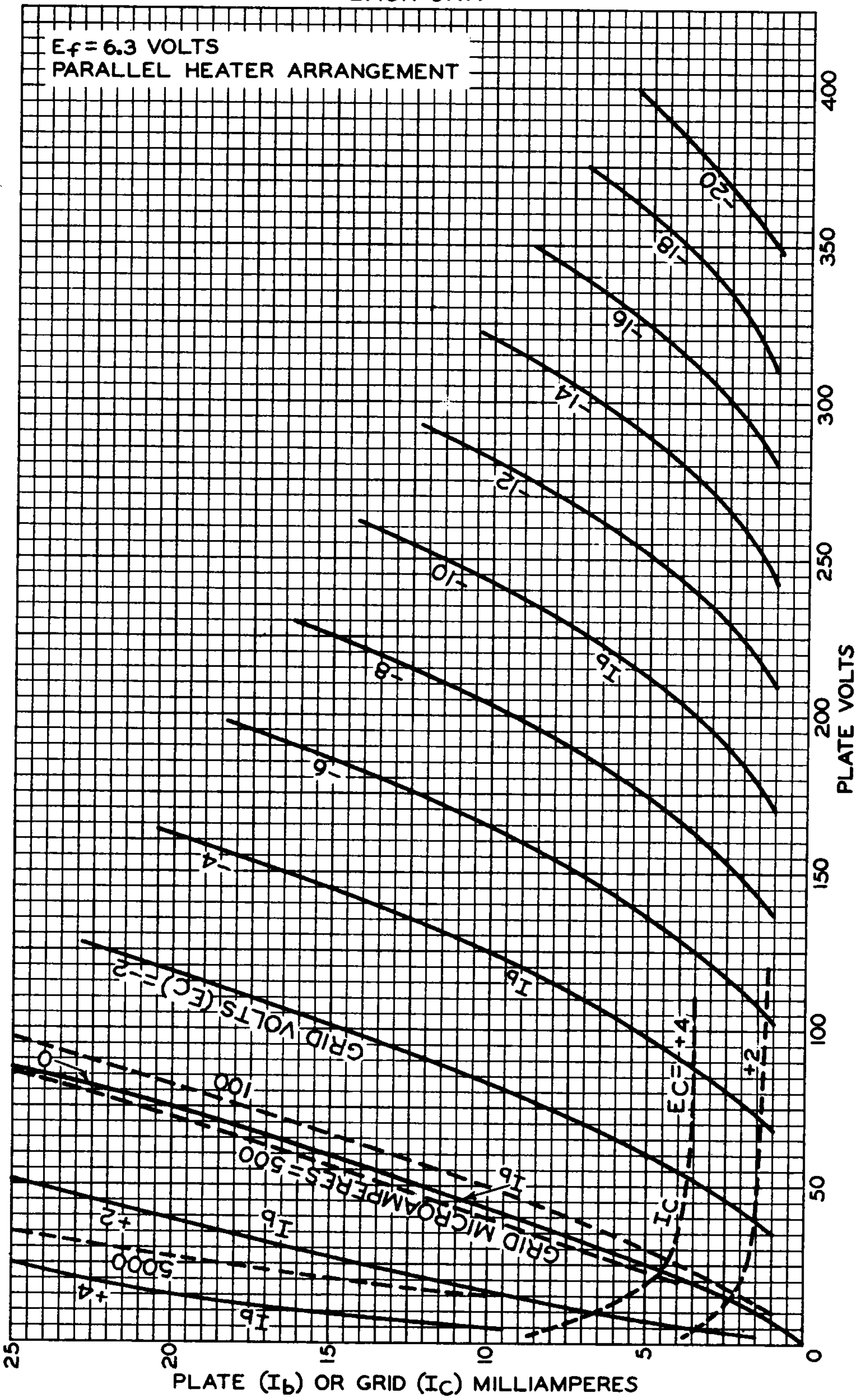
ELECTRON TUBE DIVISION 92CM-9273

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

RCA

6350

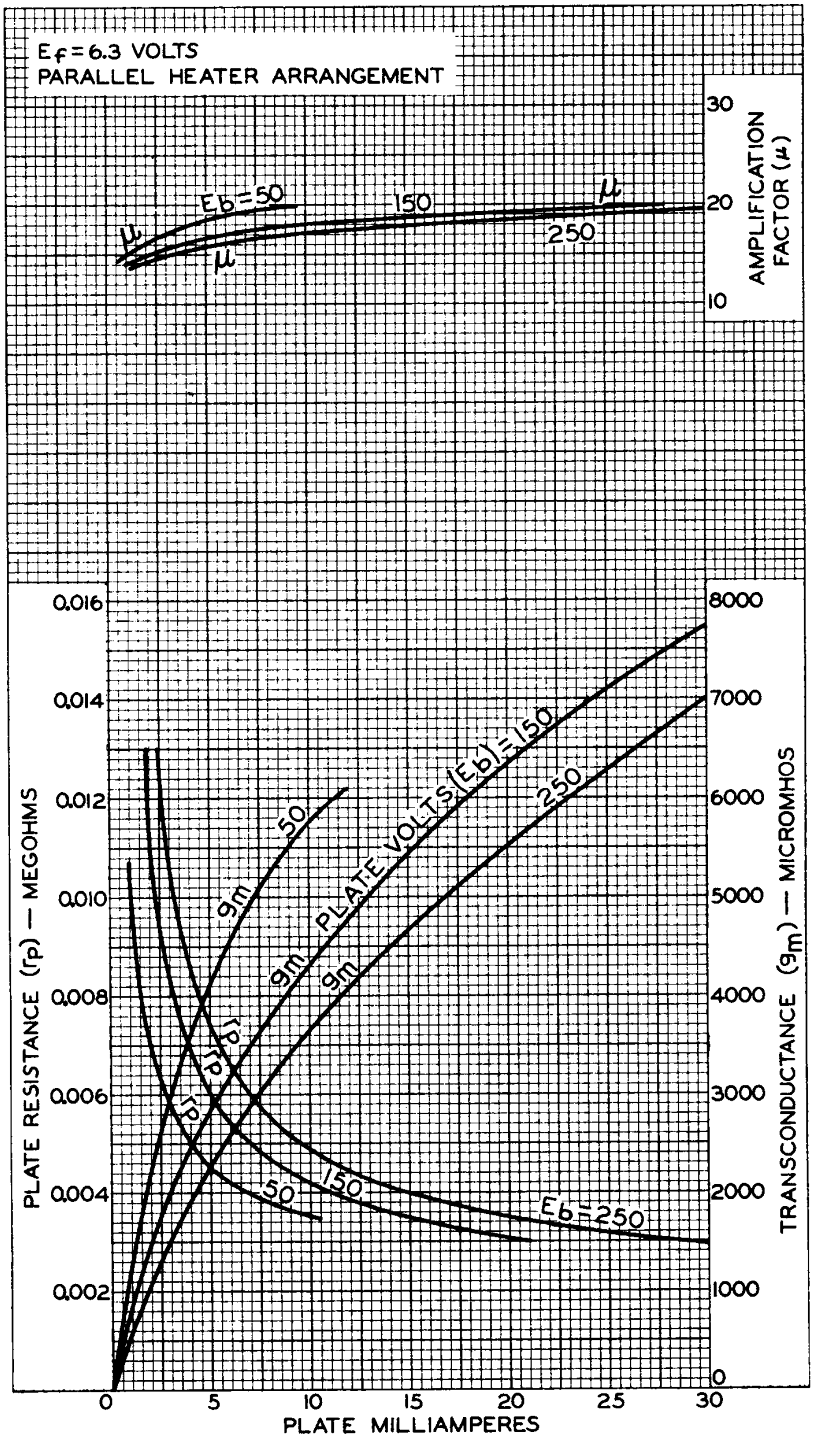
AVERAGE CHARACTERISTICS
EACH UNIT



6350

6350

AVERAGE CHARACTERISTICS
EACH UNIT



ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-9271